

06.09.2017

# Additive AB-V1

## Additive for static rinses to prevent brown discolouration

The **Additive AB-V1** is a possible process step that may prevent the discolouration of EN layers after plating. The ingredients contain an antioxidant and a pH regulator.

### Make up of the static rinse

Circulation or tap water (fresh)	97 Vol.-%
<b>Additive AB-V1 Part 1</b>	2 Vol.-%
<b>Additive AB-V1 Part 2</b>	1 Vol.-%

The static rinse tank is filled with water to approx. 90 % of the intended end volume. While stirring add the required amounts of **Additive AB-V1 Part 1** and **Additive AB-V1 Part 2** and top up to the end volume. The pH value should now be between 11 to 12.

### Maintenance

If the pH value is lower than 10 a discolouration may happen, depending on dipping time and temperature. As soon as the pH value drops below 10.5, the original pH range is adjusted again according to the application by addition of the two additives **Additive AB-V1 Part 1** and **Additive AB-V1 Part 2**.

Application	<b>Additive AB-V1 Part 1</b>		<b>Additive AB-V1 Part 2</b>
Rack	<b>1</b>	:	<b>1</b>
Barrel	<b>1 to 2</b>	:	<b>1</b>

An attack of the nickel layer has never been observed by the process step **Additive AB-V1**, even with dipping times up to 30 minutes and temperatures around 40 °C.

### Waste water treatment

All concentrates, rinse waters and waste solution must be treated and discharged in accordance with local effluent control regulations.

### Possible hazards and safety precautions

These details can be found in the material safety data sheets.

All DNC – process chemicals should be stored between 10 and 25 °C.

If excessive cooling should cause partial crystallisation within the solution, it is possible to warm it up to > 20 °C (stirring is recommended) in order to resolve the precipitations.

## Liability

This instruction manual was compiled with reference to the state of the art and all current standards, and is based on the long-term knowledge and experience of riag. However, riag cannot monitor compliance with this instruction manual and the methods described herein at the customer/end-user's premises. Work carried out with riag products must be adapted accordingly to meet local conditions. In particular, riag cannot accept liability for damage, loss or cost incurred due to a failure to adhere to this instruction manual, improper application of the methods, unauthorised technical modifications, insufficient maintenance or the absence of maintenance in respect of the requisite technical hardware or equipment, or in the event of use by unqualified personnel. riag is not liable for damage or loss caused by riag or its employees except where intention or gross negligence can be proved. riag furthermore reserves the right to make changes in relation to products, methods and the instruction manual without prior notice.

Our goods and services are subject to the General Terms and Conditions for Delivery of the Association of Surface Technology Suppliers (VLO), which can be viewed at [www.riag.ch](http://www.riag.ch) (link "terms and conditions", document "General Terms and Conditions for Delivery", version 3/2018), which we gladly send you on request.

This transaction is governed by material Swiss law (Law of Obligations), excluding private international law (conflict of laws) and intergovernmental treaties, specifically the CISG.

riag Oberflächentechnik AG  
Murgstrasse 19a  
CH-9545 Wängi  
T +41 (0)52 369 70 70  
F +41 (0)52 369 70 79  
[riag.ch](http://riag.ch)  
[info@riag.ch](mailto:info@riag.ch)